

### **AMENDMENTS TO THE CLAIMS**

*The listing of claims will replace all prior versions and listings of claims in the application:*

1. **(Withdrawn)** A glass substrate for an information recording medium formed from a disk-shaped glass plate made of a multi-component glass material containing at least silicon oxide, the glass substrate being characterized in that the glass plate includes a surface layer with an ingredient ratio of silicon oxide that is higher than an inner portion of the glass plate.

2. **(Withdrawn)** The glass substrate according to claim 1, characterized in that the surface layer has a thickness of 3 nm or less.

3. **(Withdrawn)** The glass substrate according to claim 1, characterized in that the ingredient ratio of silicon oxide in the surface layer is less than or equal to 1.2 times the ingredient ratio of silicon oxide in the inner portion.

4. **(Withdrawn)** The glass substrate according to claim 1, characterized in that the multi-component glass material contains silicon oxide and at least one of aluminum oxide and alkaline earth metal oxide, and the ingredient ratio of the at least one of aluminum oxide and alkaline earth metal oxide in the surface layer is greater than that of the inner portion.

5. **(Withdrawn)** The glass substrate according to claim 1, characterized in that the glass substrate is disk-shaped and has a surface with a texture including a plurality of projections extending in a circumferential direction of the glass substrate.

6. **(Withdrawn)** The glass substrate according to claim 5, characterized in that the surface has an arithmetic mean roughness,  $R_a$ , of 1.5 nm or less, and the plurality of projections have a maximum peak height,  $R_p$ , that is 10 nm or less.

7. **(Previously Presented)** A method for manufacturing a glass substrate for an information recording medium, the manufacturing method comprising:

a first washing step for washing a surface of a disk-shaped glass plate with an acid washing liquid, wherein an altered surface layer is formed on the surface of the glass substrate by the first washing step;

a step for grinding at least part of the altered surface layer with abrasion grains to remove at least part of the altered surface layer; and

a second washing step for washing the surface with an alkaline washing liquid, wherein the altered surface layer formed by acidic washing in the first washing step is removed by the step for grinding and the second washing step.

8. **(Currently Amended)** ~~The manufacturing method according to claim 7, wherein the removing step is performed by grinding the~~ A method for manufacturing a glass substrate for an information recording medium, the manufacturing method comprising:

a first washing step for washing a surface of a disk-shaped glass plate with an acid washing liquid, wherein an altered surface layer is formed on the surface of the glass substrate by the first washing step;

a step for grinding the altered surface layer for a depth of 0.5 nm or more with abrasion grains so that the altered surface layer has a thickness of 3 nm or less; and

a second washing step for washing the surface with an alkaline washing liquid, wherein the altered surface layer formed by acidic washing in the first washing step is removed by the step for grinding and the second washing step.

9. **(Previously Presented)** The manufacturing method according to claim 7, wherein the removing step includes scrubbing the surface with a scrub member in a circumferential direction of the glass plate while supplying the surface with diamond abrasion grains.

10. **(Previously Presented)** The manufacturing method according to claim 7, wherein the first washing step includes immersing the glass plate in a strong acid solution and then immersing the glass plate in a strong alkaline solution.

11. **(Previously Presented)** A method for manufacturing a glass substrate for an information recording medium, the manufacturing method comprising:

preparing a disk-shaped glass plate containing silicon oxide, aluminum oxide, and alkaline earth metal oxide with a uniform chemical composition;

polishing the glass plate to form a smooth surface;

immersing the glass plate in an acid solution to form an altered surface layer in which the ingredient ratio of at least one of aluminum oxide and alkaline earth metal oxide is decreased;

removing at least part of the altered surface layer with an abrasive to such that the altered surface layer has a thickness of 3 nm or less; and

uniformly etching the altered surface layer having a thickness of 3 nm or less while washing off the abrasive with an alkaline washing liquid.

12. **(Original)** The manufacturing method according to claim 11, wherein the acid solution is a strong acid solution having a pH of 3.0 or less.

13. **(Previously Presented)** The manufacturing method according to claim 12, wherein said forming a surface layer includes immersing the glass plate in the strong acid solution and then immersing the glass plate in a strong alkaline solution having a pH value of 10.5 or less.

14. **(Previously Presented)** The manufacturing method according to claim 11, wherein said forming the surface layer includes removing adhered substances that are adhered on the smooth surface.

15. **(Original)** The manufacturing method according to claim 11, wherein the alkaline washing liquid is an alkaline solution having a pH of 11.0 to 13.0.

16. **(Previously Presented)** The manufacturing method according to claim 7 wherein the step for grinding is a texture formation step for forming a texture on the surface of the glass plate.

17. **(Previously Presented)** The manufacturing method according to claim 7, wherein the first washing step, the step for grinding, and the second washing step are controlled to adjust the thickness of the altered surface layer finally remained on the glass plate.

18. **(Previously Presented)** The manufacturing method according to claim 11, wherein said immersing, said removing, and said uniformly etching are controlled to adjust the thickness of the altered surface layer finally remained on the glass plate.